

BAR CODE

Every item we find in a supermarket has a number to identify it quickly. This is the bar code.

The bar code of every thing has 13 digits. The bars are a way to introduce these numbers through a laser reader.

**THE MEANING OF A BAR CODE**

We are going to do this activity with the above example. Fill the gaps with the bar code.

Country												Control

WHAT IS THE INFORMATION OF A BAR CODE?

The first two figures are the country code.

The following five digits are the information about the company.

The following five digits are about the product and, finally, the last digit is the control digit which is the interesting subject for us in this chapter.

WHAT IS THE PURPOSE OF THE CONTROL DIGIT?

The purpose of the control digit is to find possible reading or writing mistakes by a machine.

The control code has a formula that links its value with the other numbers.

FORMULA

To get the control digit you have to do the following operations:

Add the digits which are in odd position from left to right not including the last digit because it is the control digit.

Add up the even digits from left to right and after that multiply the result by 3.

After that we add the two results.

Finally, the control digit is the number we have to add in order to get a multiple of ten.

In this case it is 7.

5	9	0	1	2	3	4	1	2	3	4	5	
↓		↓		↓		↓		↓		↓		
	+		+		+		+		+		=	
	↓		↓		↓		↓		↓		↓	
		+		+		+		+		+		x3 =

There are other numbers to identify something or someone. For instance, the identity card, the bank account number, the international standard book number (ISBN)...

Now, you have to check your bar codes.

Surname and name.....List number.....

BAR CODE

Take two different products –no books–; then cut the bar code off and attach it in the empty space and complete the following questions:

Item 1

Introduce the bar code in the chart.

[illegible]

What do you think about the country? Write the country and next to it the identification number.

What do you think about the company? Write the company and next to it the identification number.

What do you think about the product? Write the product and next to it the identification number.

Bar code

Finally we are going to check the control digit doing the right operations to calculate it:

Diagram illustrating a multiplication problem setup on a 3x8 grid. The top row contains 7 empty boxes followed by a shaded box. The middle row contains 7 empty boxes followed by an equals sign. The bottom row contains 7 empty boxes followed by "x3 =". Arrows point from each of the 7 empty boxes in the top row to the corresponding empty box in the middle row. Each of the 7 empty boxes in the middle row contains a plus sign. The 7th empty box in the middle row contains an equals sign.

Item number 2

Introduce the bar code in the chart. You can attach the bar code in the empty space:

[illegible]

What do you think about the country? Write the country and next to it the identification number.

What do you think about the company? Write the company and next to it the identification number.

What do you think about the product? Write the product and next to it the identification number.

Bar code

Finally we are going to check the control digit doing the right operations to calculate it:

[illegible]